

Severe Asthma Index



Ranking, Update and Expansion Report 2025

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Executive Summary and Policy Brief

The Severe Asthma Index 2025 measures how 45 countries organise, deliver, and sustain care for people living with severe asthma. It assesses five interconnected dimensions that together illustrate how policy, access, system design, health outcomes, and environment interact to shape national performance.

Key Findings

Balanced systems perform most consistently. Countries that maintain steady results across all five dimensions, such as France, Italy, and the United Kingdom, tend to achieve higher overall aggregate scores than those with sharp contrasts between categories.

Access remains the central determinant of equity. High access scores in countries such as Denmark, the Netherlands, and Poland correlate with lower variability and more stable outcomes across other categories.

Policy coherence supports implementation. Systems with sustained national frameworks, including France and Italy, demonstrate that long-term policy continuity contributes to consistent performance even when resources differ.

Health system coordination matters as much as investment. Variations in Health System Characteristics highlight that coordination and monitoring capacity, rather than funding level, determine whether policy is translated into practice.

Environmental determinants shape outcomes. Countries with high environmental scores, such as Australia and Switzerland, display more stable overall results, emphasising that environmental health is integral to asthma prevention.

Strategic Implications

The Index findings suggest that effective severe asthma management depends on coherence across policy, clinical, and environmental domains; foreseeable and equitable access frameworks; continuous data integration and coordination; investment in prevention and environmental resilience; and institutional continuity supporting long-term learning.

Conclusion

The 2025 Severe Asthma Index portrays a global landscape of diverse but converging efforts. Countries are increasingly recognising severe asthma as a systemic issue requiring integrated policy, data, and prevention. While national approaches differ, the underlying drivers of progress - balance, coordination, and equity - are shared across regions. The findings provide a robust evidence base for future policy development and monitoring, offering a comparative view of how systems align around shared priorities in respiratory health.

Disclosures

This Severe Asthma Index was developed with unrestricted funding from Sanofi and Regeneron. All analyses, conclusions, and recommendations were produced independently by the Copenhagen Institute for Futures Studies (CIFS).

Acknowledgements

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Report Overview

This report combines three components designed to give a clearer and more current picture of how countries' national health systems respond to severe asthma. Building on the foundations of the 2023 edition, the Severe Asthma Index 2025 expands geographical coverage, improves data completeness, and refines several indicators to reflect the latest evidence and policy developments.

The first section presents the Severe Asthma Index 2025, which evaluates 45 countries across five dimensions: Policy Context, Access and Care Coverage, Health System Characteristics, Disease Burden, and Environmental Factors. With an expanded country sample, the 2025 index provides a more globally representative view of performance across diverse governance models and socio-economic contexts. The results show that there is no single pathway to improvement. Instead, high-performing countries tend to demonstrate coherence and alignment between policy, resources, and long-term prevention strategies. This section also discusses continuity with, and progress toward, the key action areas outlined in the 2023 report.

The second section, included as Appendix 1, provides the Severe Asthma Update 2023–2025. This update focuses only on the countries that appeared in the 2023 edition and summarises recent policy changes, new datasets, and improvements in data coverage. It draws on newly available indicators, policy documents, and expert input to close remaining gaps. Changes in ranking or aggregate scores between 2023 and 2025 therefore, reflect a combination of real-world progress and methodological refinement. Several indicators were updated or replaced to ensure accuracy and comparability. As a result, some shifts represent improved measurement rather than direct changes in national outcomes.

The third component, included as Appendix 2, presents detailed country profiles for Romania and Cyprus, the newest systems added in the 2025 edition. These profiles highlight system characteristics, policy landscapes, and key gaps that inform their baseline positioning within the ranking.

Together, these three elements provide a unified, transparent, and forward-looking assessment of severe asthma readiness in 2025. The combined approach connects expanded global benchmarking with targeted updates and country-level insights that support ongoing policy dialogue and system strengthening.

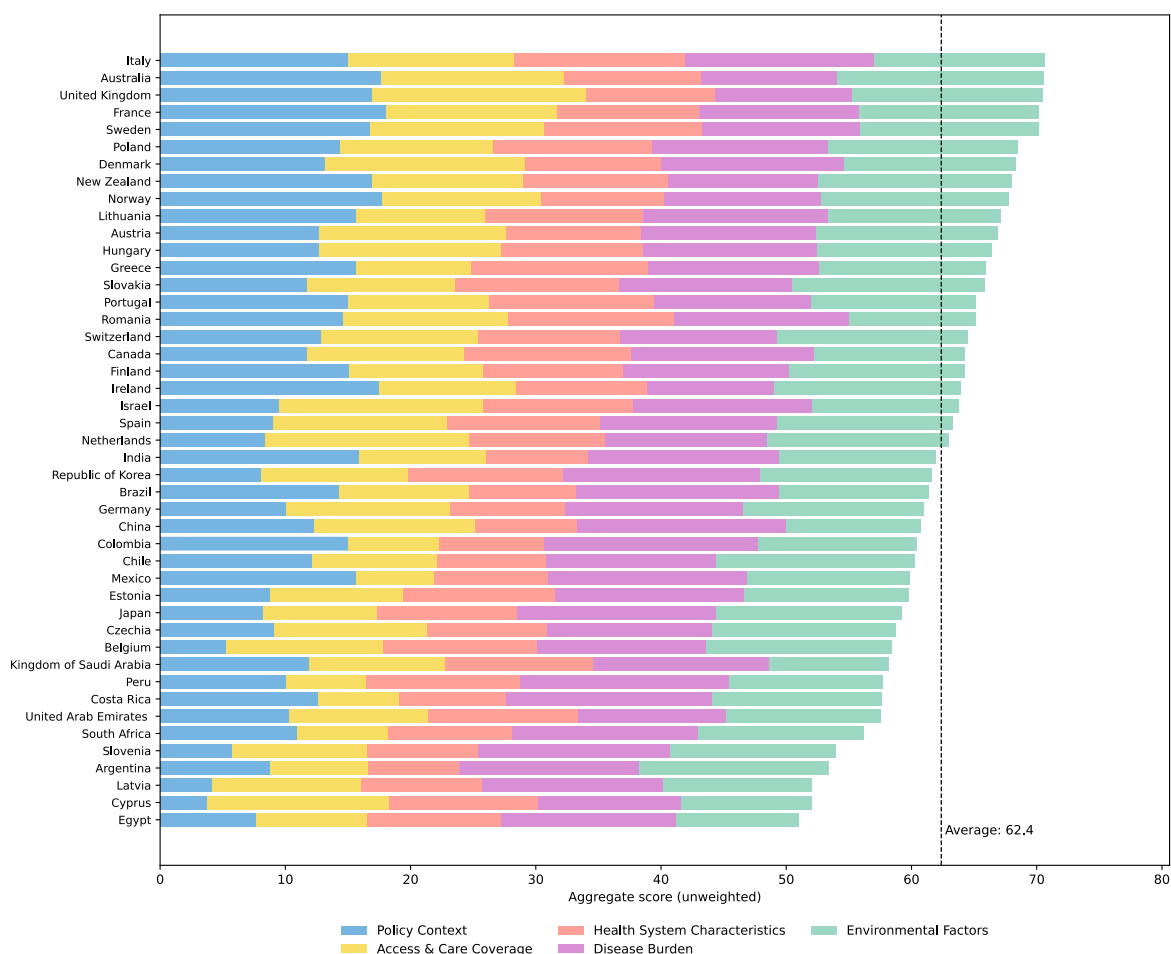
Severe Asthma Index 2025: System performance and dynamics

Current State Analysis

The Severe Asthma Index 2025 analyses 45 national health systems across five interconnected dimensions: Policy Context, Access and Care Coverage, Health System Characteristics, Disease Burden, and Environmental Factors. The expanded dataset offers a more representative picture of global capacity to manage severe asthma across diverse institutional and socio-economic settings.

The results show that there is no single path to progress. Systems perform well in different areas depending on their governance, health priorities, and policy traditions. What unites the higher-scoring systems across dimensions is coherence and coordination: the ability to align policy, resources, and prevention within stable governance frameworks.

Severe Asthma 2025 Ranked Stacked Bar Charts



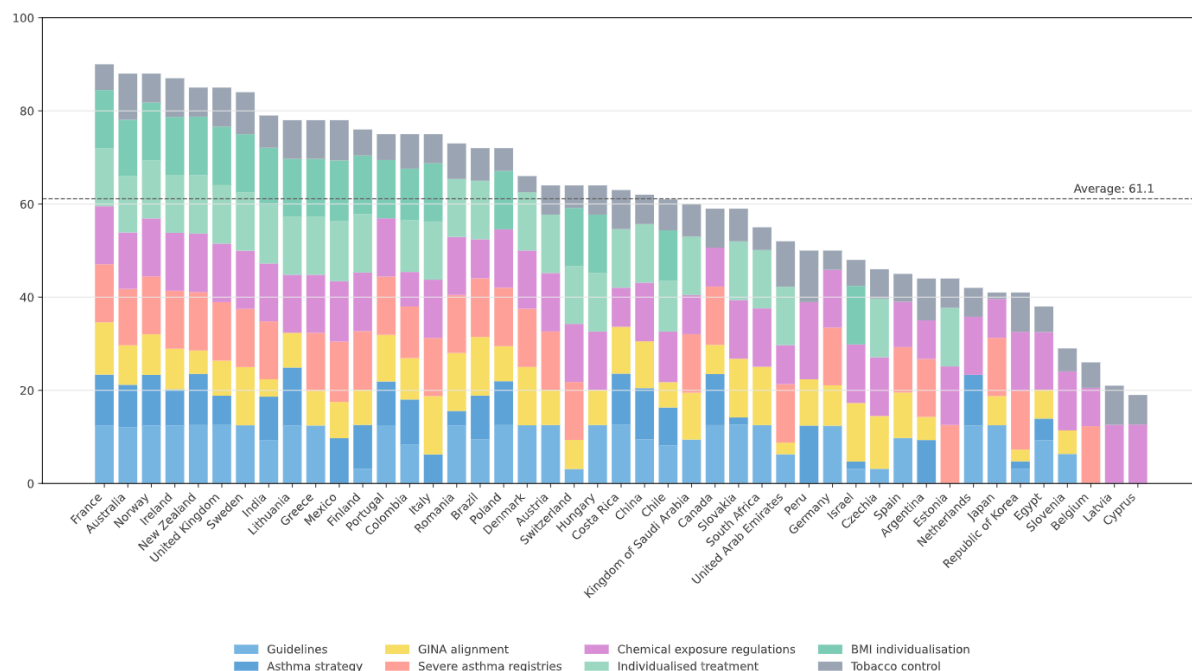
Policy Context

Across most countries, policy attention to severe asthma has increased, though the degree of institutionalisation varies. Many countries report improved coordination between respiratory health and broader noncommunicable disease strategies.

Countries such as France, Italy, and the United Kingdom show high Policy Context scores (85–90), reflecting established frameworks and national guidance aligned with international standards. In contrast, Japan and the Republic of Korea score lower in this category (41), indicating less formalised integration of asthma within national public health strategies.

Some countries with moderate scores, such as Poland (72) and Portugal (75), demonstrate that coherent regional implementation can partially offset the absence of detailed national frameworks. Lower Policy Context values in Latvia (21) and Slovenia (29) suggest that policy continuity remains limited where institutional capacity or political prioritisation is constrained.

Overall, the Policy Context dimension captures both the presence and the maturity of national approaches. Countries with stable, well-articulated policy frameworks tend to display more balanced results across the other Index dimensions.

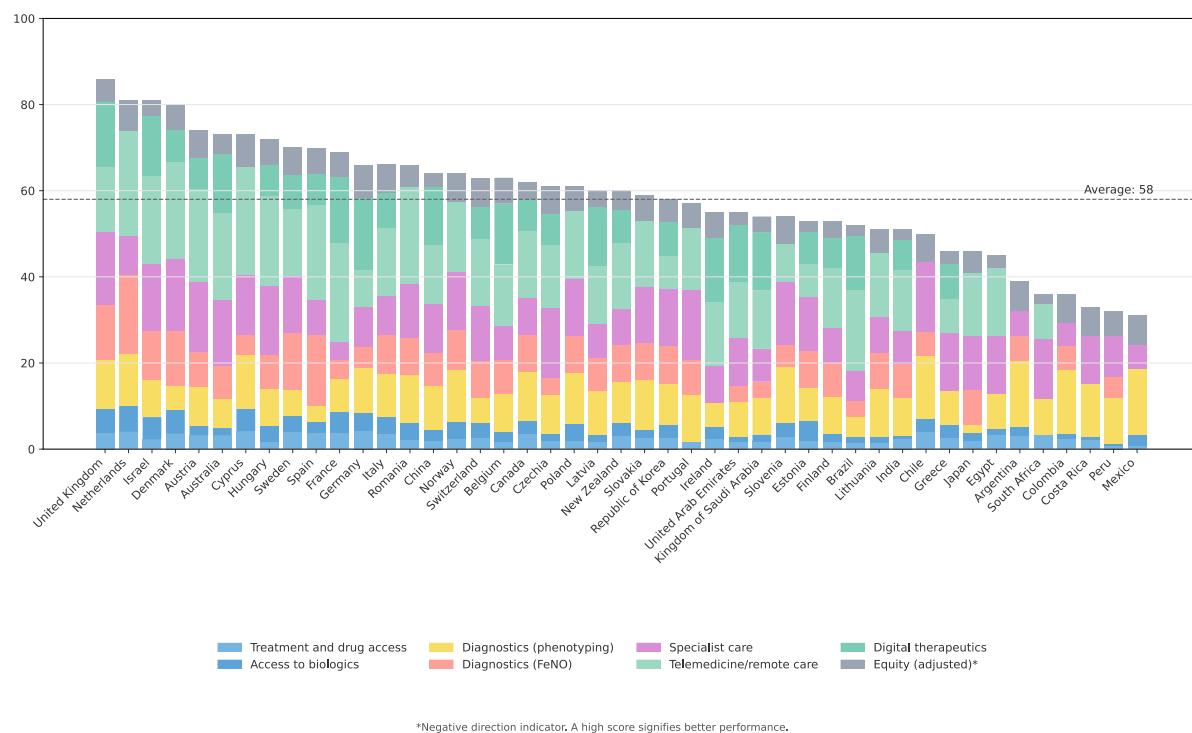


Access and Care Coverage

The Access and Care Coverage scores show substantial variation across countries, ranging from 31 to 86. Countries such as Denmark (80), the Netherlands (81), and the

United Kingdom (86) report the highest values, reflecting structured referral networks and consistent reimbursement coverage. Moderate scores in Cyprus (73), Hungary (72), Romania (66), Poland (61), and Spain (70) indicate expanding but uneven access, often shaped by regional delivery systems. Lower scores, as seen in Greece (46), Japan (46), and Ireland (55), point to challenges in affordability, workforce distribution, or administrative consistency rather than overall resource scarcity.

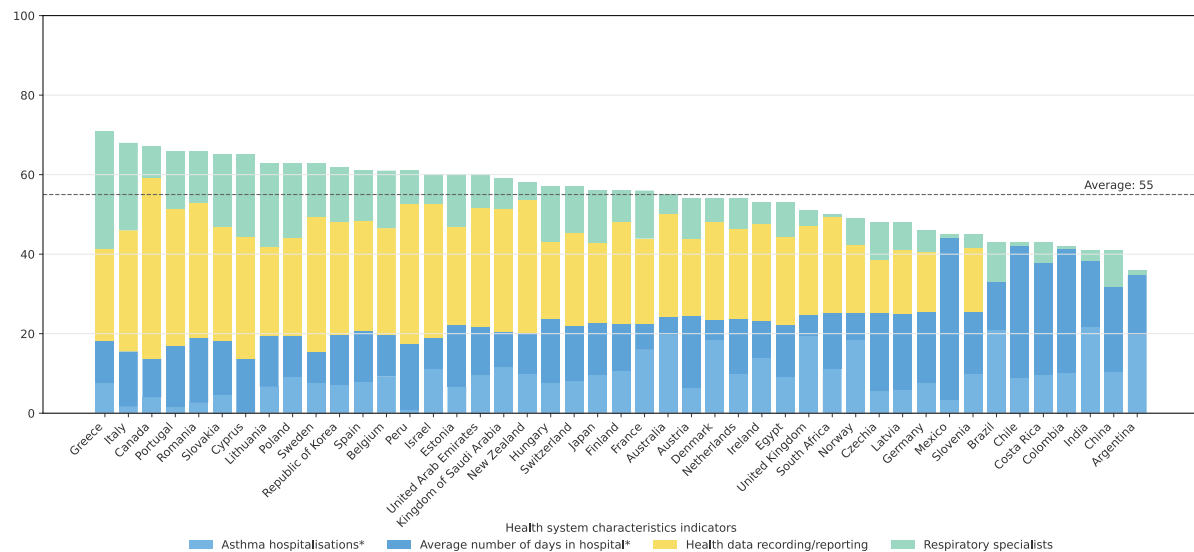
Patterns across the data show that access remains the strongest determinant of overall system performance. Countries where access exceeds aggregate scores tend to achieve greater equity and stability across all dimensions.



Health System Characteristics

The Health System Characteristics dimension assesses how effectively systems coordinate care, monitor outcomes, and maintain continuity. Scores range from 45 to 71, showing moderate variation across regions. Countries such as Greece (71), Romania (66), and Italy (68) show higher results, reflecting structured specialist networks and data systems supporting follow-up and referral. Systems with moderate outcomes, including Poland (63) and Ireland (53), show ongoing efforts to strengthen continuity through digitalisation and workforce training. Lower results in Slovenia (45) and Germany (46) indicate persistent fragmentation between levels of care or uneven data integration.

In most cases, higher Health System scores correspond with stronger overall aggregate results. This suggests that investment in coordination and information systems directly supports consistent performance across the Index.



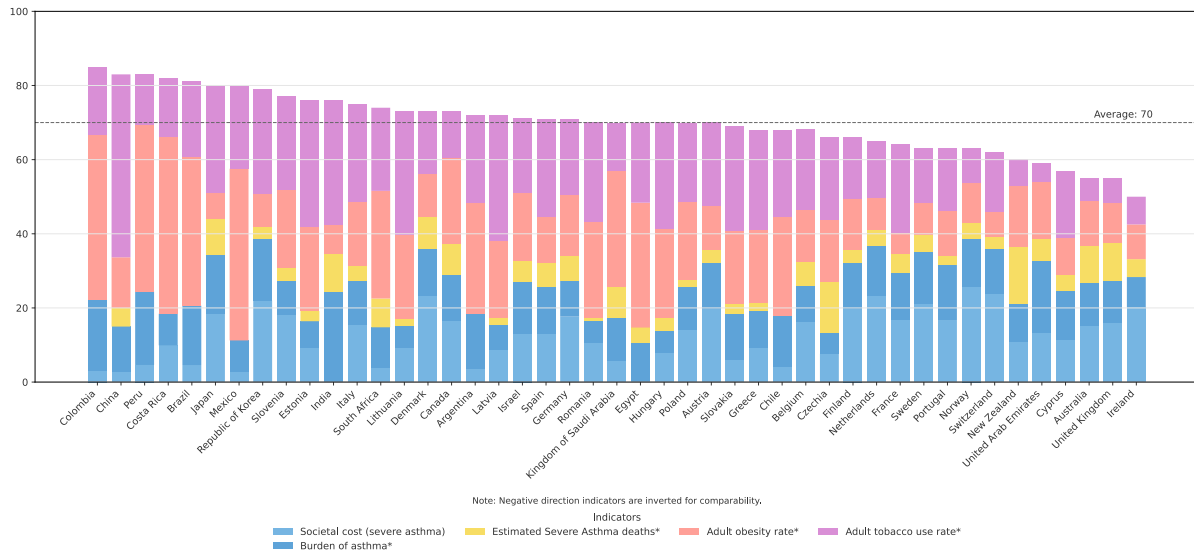
* Negative direction indicators: higher values indicate better performance after ranking/normalisation.

Disease Burden

The Disease Burden dimension captures indicators of health outcomes and system effectiveness in managing severe asthma. Scores in this category range from 50 to 80. Japan (80), the Republic of Korea (79), Slovenia (77), and Australia (55) illustrate distinct national contexts producing similar patterns of improvement. Systems combining strong surveillance and early intervention tend to record moderate-to-high values, even when resources differ.

Several countries with strong policy and access frameworks, such as Italy (75) and Denmark (73), report stable disease burden scores, suggesting that prevention and management programmes are yielding measurable benefits. Conversely, systems with relatively low Health System scores often show higher disease burden values, implying that gaps in coordination may influence health outcomes more than resource availability.

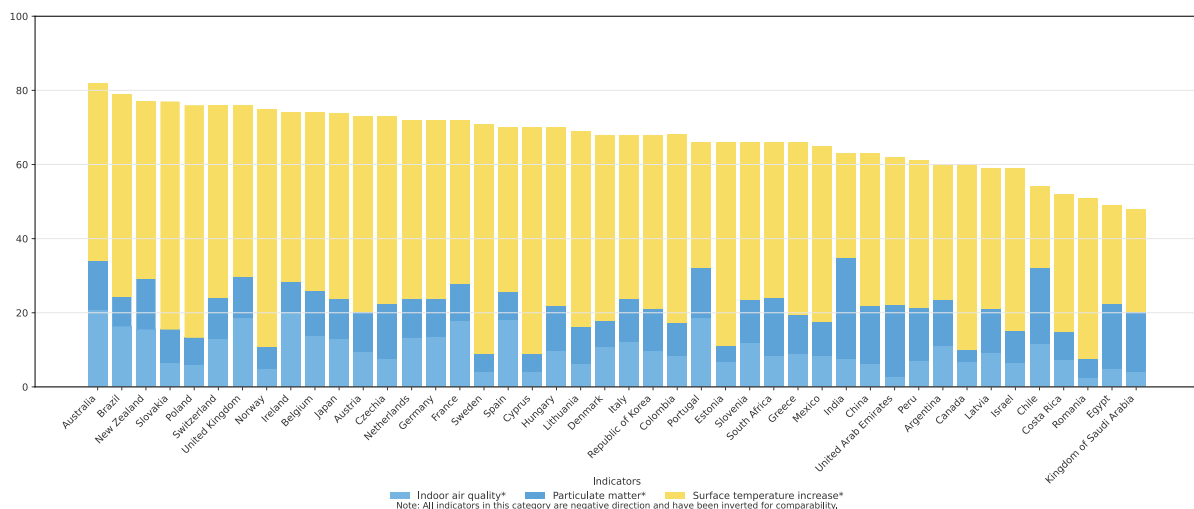
Overall, countries with balanced performance across Policy, Access, and Environment achieve the most consistent disease burden results.



Environmental Factors

The Environmental Factors dimension displays a widespread, ranging from 48 to 82. Countries with strong environmental protection frameworks, including Australia (82), Switzerland (76), and Poland (76), report higher values. These systems combine air quality management, urban planning, and occupational health measures that contribute to overall stability in respiratory outcomes. Moderate environmental performance in France (72) and Spain (70) reflects established environmental standards but ongoing challenges with urban air pollution. Lower values in the Kingdom of Saudi Arabia (48), and China (54) illustrate how industrial or climatic conditions can constrain progress even when health policy is relatively strong.

The Index confirms that environmental determinants play a central role in asthma outcomes. Countries that integrate environmental and health policy consistently perform better across all other dimensions.



Regional and Contextual Patterns

Regional analysis shows distinct system profiles. Europe displays stable policy maturity and growing emphasis on data integration. Asia-Pacific countries show steady progress in disease management and early detection but variation in environmental governance. Latin American systems often balance expanding access with environmental and economic pressures, producing moderate but improving results, especially relating to tobacco use rates. Middle Eastern countries, where data is available, display advancing access indicators, but environmental variability remains a concern.

These patterns confirm that different structural pathways can lead to progress. Effective systems are those that link national priorities to coordinated implementation, regardless of governance model or income level.

Overall Assessment

The 2025 data depict a complex but generally positive global landscape. Countries perform well where there are policy coherence, accessible care, strong information structures, and environmental resilience. The balance between these dimensions, rather than the level of performance in any single one, appears to determine system sustainability. Countries that achieve moderate or high scores across all five dimensions also show smaller performance gaps between sub-indicators, signalling greater equity and consistency.

Alignment with the 2023 Action points

The 2025 results can be mapped onto the five broad areas of system action identified in the 2023 framework. This section interprets the Index findings through that lens, using data patterns to illustrate how countries are engaging with those thematic priorities.

Whole-System Integration

The data show that systems performing consistently across dimensions, such as France, Italy, and the United Kingdom, tend to align policy, access, and environmental measures. Their aggregate scores (70.2–70.6) are underpinned by stable policy frameworks (88–90) and balanced environmental results (70–72). This coherence reflects cross-sector coordination rather than reliance on any single intervention.

Systems where one dimension underperforms, such as Germany (46 Health System Characteristics) or Belgium (26 Policy Context), display greater internal variation. The

data thus suggest that integration across institutional levels is a more reliable predictor of consistency than any specific model of care.

Resource Efficiency and Equity

The 2025 results indicate that efficient allocation, not total expenditure, drives equity. Countries with moderate economic capacity, such as Poland (aggregate 68.5) and Hungary (66.4) achieve similar results to higher-income peers through structured access and coordinated delivery. Meanwhile, countries with strong resources but fragmented design, including Germany (61.0) or Belgium (58.4), show that system coherence matters more than financial scale.

Countries with higher Access and Care Coverage scores, such as Denmark (80) and the Netherlands (81), also show above-average aggregate stability. This pattern supports the interpretation that predictable coverage frameworks underpin equitable outcomes.

Data and Coordination Capacity

The Health System Characteristics dimension reflects coordination and data infrastructure. Greece (71) and Slovakia (65) display strong health system coordination, corresponding with stable aggregate results. By contrast, Ireland (53) and Germany (46) show that gaps in continuity and information systems may limit the translation of policy commitment into practice.

Systems that score between 55 and 65 in this category, such as Portugal, Poland, and Hungary, show gradual convergence between policy goals and measurable performance. This indicates improving monitoring capacity across diverse governance models.

Prevention and Early Intervention

The relationship between Disease Burden and Environmental Factors provides insight into how prevention translates into outcomes. Countries with more balanced scores between these two dimensions tend to report more stable overall results. For example, Italy (75 and 68) and Denmark (73 and 68) demonstrate effective interaction between clinical management and environmental protection. In contrast, wider disparities between these categories, as seen in Japan (80 and 74) and Ireland (50 and 74), suggest that strong treatment systems may mitigate but not eliminate underlying risk exposure.

This pattern supports the conclusion that prevention operates across both clinical and environmental domains, and systems that address both consistently achieve greater sustainability.

Patient Access and Involvement

Access data within the Index capture dimensions of equity and patient-centredness. Countries where Access scores exceed aggregate results by 10 points or more, such as Denmark, the Netherlands, and the United Kingdom, demonstrate strong alignment between service design and patient access. In other settings, where access lags behind policy or environmental progress, the findings suggest that administrative or regional fragmentation may hinder patient engagement and continuity of care.

Across the dataset, countries with more balanced performance in Access and Policy Context also report narrower gaps in disease burden, indicating that accessibility directly supports health equity.

Cross-Dimensional Insights

The Index confirms several consistent associations. Systems that align policy and environmental priorities tend to show stronger disease management results. Access and equity remain the central enablers of progress across all other categories. Data coordination and monitoring capacity are necessary conditions for translating strategic intent into measurable outcomes. The balance between dimensions is a better indicator of resilience than any individual score.

Appendix A: Severe Asthma Update

2023–2025

Summary

Between 2023 and 2025, overall aggregate scores remained relatively stable, with only modest shifts across most countries. Italy emerged as the new top performer, moving from second to first place, while Australia slipped slightly to second despite maintaining a nearly identical score. The United Kingdom rose to third, reflecting stronger policy coherence and access performance. Denmark showed one of the most notable improvements, moving from 15th to 7th, indicating stronger system alignment and implementation capacity.

Central and Eastern European countries, including Poland, Lithuania, and Slovakia, also advanced, signalling gradual convergence towards higher-performing systems. In contrast, several Western and Nordic countries, such as Sweden, Norway, and France, lost ground despite relatively stable scores, suggesting slower progress compared with their peers rather than structural deterioration.

It is important to note that while the 2025 edition of the Index included additional countries overall, this update analyses only those present in both 2023 and 2025. This approach ensures that changes reflect comparable data and consistent methodology. Some imputed values may differ slightly due to the expanded global dataset, which affected certain reference and normalisation points, but cross-year analysis remains limited to the shared country set for methodological accuracy.

Overall, the results suggest that countries with coherent policy frameworks, well-integrated access systems, and continued investment in prevention, digital health, and environmental health resilience are better positioned to sustain progress in health system performance.

Introduction and Purpose

This update summarises progress recent policy and system changes. The process included identifying newer datapoints, policy documents and consulting country experts to address remaining data gaps. It also reviews the release of new datasets relevant to access, care, and equity. While these updates have improved the overall completeness of the assessment, several information gaps persist, underscoring the importance of continued data monitoring and regular revision.

Changes in ranking and aggregate scores between 2023 and 2025 reflect both genuine developments in national policies and health system performance, as well as updates to underlying datasets and indicator methodologies. Several indicators were refined or replaced based on newly available sources, leading to adjustments in some country scores that reflect improved accuracy and coverage rather than direct changes in outcomes.

Summary of Rank and Score Changes (2023–2025)

Overall Trends

The 2025 results indicate moderate stability across most countries, with relatively small variations in total scores. The overall ranking shows continuity at the top but growing diversity in the middle range. A number of Central and Eastern European systems continued to improve, while several established Western and Nordic systems experienced relative decline. Progress appears incremental rather than transformative, suggesting that while reform efforts and investments continue, systemic breakthroughs remain limited. These results point to a period of consolidation rather than major structural change.

Top Performers and Stability

Italy now leads the ranking, supported by balanced performance across policy context, access, and outcomes. Australia remains a close second, maintaining a high score that reflects long-term consistency, governance stability, and effective system design. The United Kingdom rose from fifth to third, driven by modest but broad-based gains in access, prevention, and system coordination. France and Sweden remain within the top tier, although both fell slightly in relative ranking, indicating stable but slower progress. New Zealand and Norway continue to perform well but have been overtaken by faster-improving peers. Overall, the top segment of the Index reflects mature systems that are consolidating their positions rather than undergoing major shifts.

Countries Showing Improvement

Denmark recorded one of the largest upward movements, advancing from 15th to 7th, reflecting stronger policy coordination, especially regarding guidelines and alignment with GINA, improving treatment access, particularly for biologics. Poland also rose

significantly, moving from 13th to 6th, due to clearer alignment between policy design and implementation and continued strengthening of access frameworks. Slovakia climbed from 23rd to 15th, and Portugal from 22nd to 16th, both showing gradual progress in system integration and service coordination. Lithuania’s steady improvement reflects stronger data systems and an expanding focus on prevention and environmental health. Switzerland also gained slightly, consolidating its position in the upper-middle range. These upward trends suggest that sustained investment in system coordination and evidence-based policy can yield visible gains, even within relatively short timeframes.

Countries with Declining Positions

Several countries experienced relative declines in ranking despite stable or slightly lower scores. Greece fell from 7th to 13th and Hungary from 8th to 12th, reflecting slower momentum compared to improving peers rather than deterioration. New Zealand dropped from 4th to 8th, and France from 3rd to 4th, both maintaining strong performance but outpaced by others with faster improvements. Sweden moved from 6th to 5th, retaining a solid score but losing comparative advantage. Germany also declined modestly, with limited progress in access and efficiency indicators. Belgium, Spain, demonstrate a slight drop towards the lower end of the ranking, showing little movement, and relatively stable scores, underscoring persistent challenges in coordination and system-level equity.

Regional Patterns

Regional patterns remain broadly consistent with the 2023 baseline but show subtle realignment. Southern Europe continues to perform well overall: Italy remains the top performer, Portugal has improved, and Greece, while stable, shows slower relative progress. Central and Eastern European systems demonstrate steady convergence towards higher performance. Poland, Slovakia, and Lithuania show the clearest gains, while Czechia and Hungary remain stable. Among Nordic countries, Denmark and Sweden strengthened its position, Finland and Norway saw slight relative decline. In Western Europe, France and Switzerland remain high-performing and consistent, while Germany and the Netherlands show limited movement and minor reductions in access and efficiency indicators.

Key Takeaway

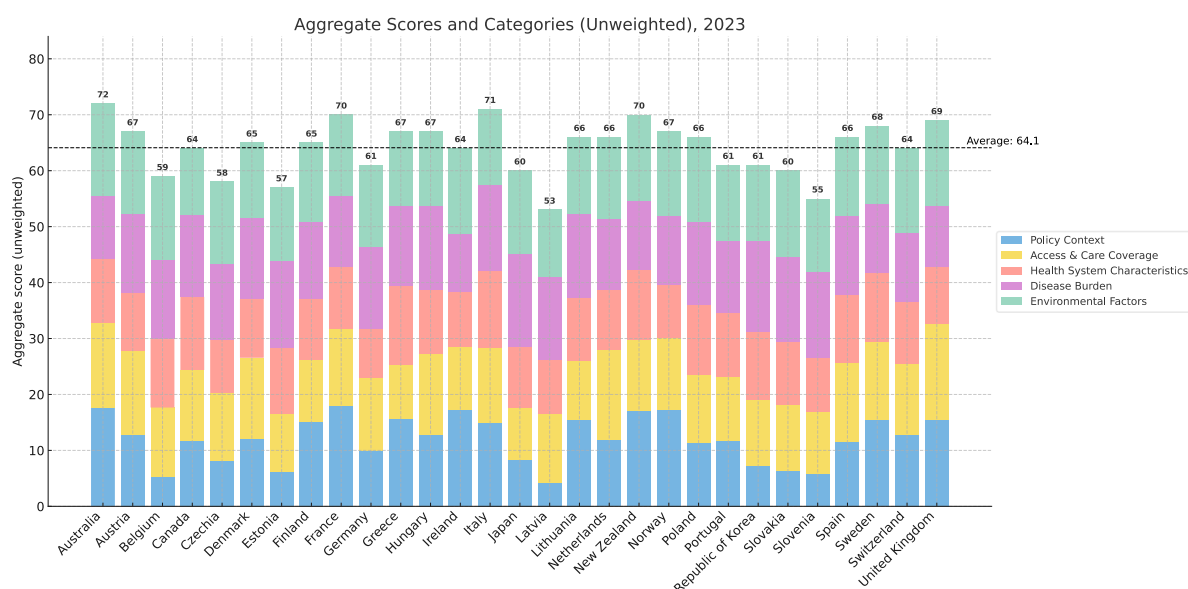
Between 2023 and 2025, Italy, Australia, and the United Kingdom stand out as the most stable and well-performing systems, while Denmark, Poland, and Slovakia achieved the clearest improvements. Declines were largely relative, reflecting stronger progress among peers rather than weakening performance. The findings reaffirm that countries with coherent policy frameworks, integrated service delivery, and sustained investment in prevention, digitalisation, and equitable access are best equipped to maintain resilient and effective health systems over time.

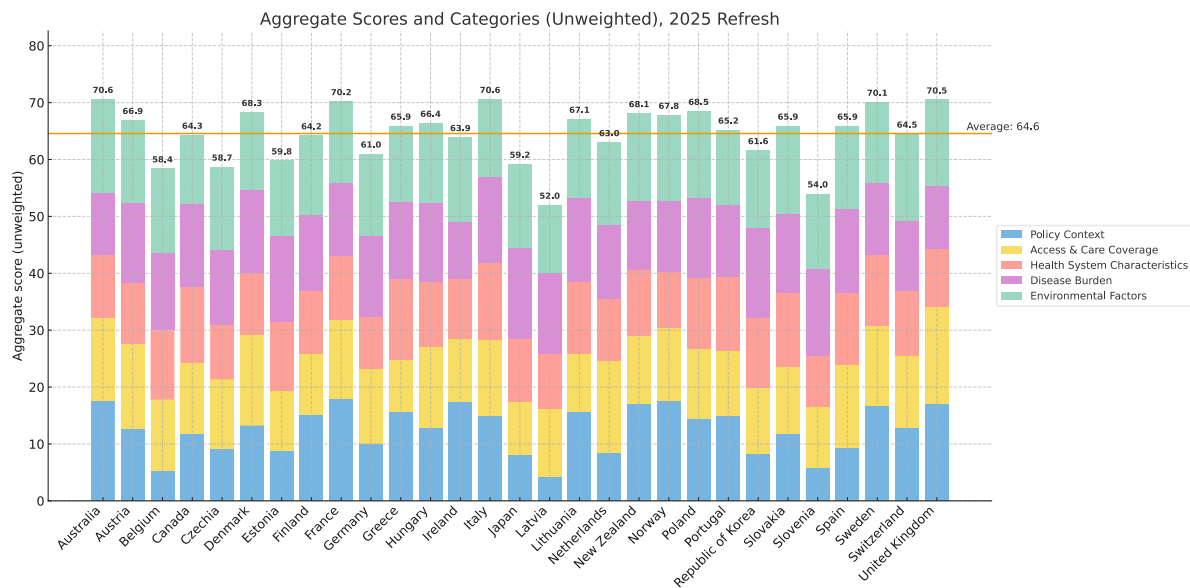
Additional Notes on Methodology

For this 2023–2025 update, only countries present in both Index editions were analysed to maintain consistency and comparability. While the 2025 dataset includes several new countries, these were excluded from direct comparative analysis. Some imputed values and normalised indicators differ slightly from 2023 due to the broader dataset and recalibrated global benchmarks. These adjustments improve overall accuracy and representativeness without affecting the comparability of shared country results.

Data and Indicator Updates

Between 2023 and 2025, multiple indicators across the five analytical categories were updated to reflect new or revised data sources.





In **Access and Care Coverage**, equity measures (unmet need for healthcare due to distance, financial barriers, or waiting lists) were updated for all countries except Australia and the United Kingdom, following the release of new Eurostat and complementary national datasets.

In **Health System Characteristics**, updated figures were incorporated for annual asthma hospitalisations in Ireland, Italy, Lithuania, and Portugal, and for average hospital days per asthma patient in Austria, Norway, and Portugal. These changes were made to align with the latest available OECD and national data, though in some cases the newest datapoints still predate 2023.

The **Disease Burden** category was updated for all countries using revised WHO and World Bank data on adult obesity and tobacco use. Only Germany and Switzerland retained older datapoints due to data unavailability.

Within **Environmental Factors**, all European countries received updated values for indoor air quality following the release of new Euro-SILC survey data.

In addition to these cross-country updates, individual national changes influenced overall scores. For instance, Denmark, Czechia, Poland, and Slovakia improved their scores following the publication or confirmation of new asthma guidelines and best-practice alignments with GINA recommendations. Denmark and Slovakia also showed marked progress in treatment access and data collection through participation in multinational registries (ISAR, DSAR, or ERS). Meanwhile, small changes in data recording or reporting were observed in Austria, Canada, Germany, and the United Kingdom.

Together, these updates indicate that part of the observed score variation between 2023 and 2025 stems from **enhanced data precision and comparability**, complementing actual policy and system developments.

Country	AGGREGATE SCORE 2025 (UNWEIGHTED)	AGGREGATE SCORE 2023 (UNWEIGHTED)	Rank 2025	Rank 2023
Australia	70.6	72	2	1
Austria	66.9	67	11	10
Belgium	58.4	59	27	25
Canada	64.3	64	18	18
Czechia	58.7	58	26	26
Denmark	68.3	65	7	15
Estonia	59.8	57	24	27
Finland	64.2	65	19	16
France	70.2	70	4	3
Germany	61.0	61	23	21
Greece	65.9	67	13	7
Hungary	66.4	67	12	8
Ireland	63.9	64	20	19
Italy	70.6	71	1	2
Japan	59.2	60	25	24
Latvia	52.0	53	29	29
Lithuania	67.1	66	10	14
Netherlands	63.0	66	21	11
New Zealand	68.1	70	8	4
Norway	67.8	67	9	9
Poland	68.5	66	6	13
Portugal	65.2	61	16	22
Republic of Korea	61.6	61	22	20
Slovakia	65.9	60	15	23
Slovenia	54.0	55	28	28
Spain	65.9	66	14	12
Sweden	70.1	68	5	6
Switzerland	64.5	64	17	17
United Kingdom	70.5	69	3	5

Australia

Changes in Access and Care Coverage

Health service access and equity imputed value became higher upon adding new countries in expanded version of the SAI, resulting in a change from 2.9 to 5.2.

Changes in Health System Characteristics

A slight change was tracked on the *Health data collection and reporting* indicator, with the total score changing from 12 to 13, due to being a part of a multinational registry together with New Zealand¹.

Instead of previously imputer number of respiratory specialists per 100,000 (4,42), this indicator now represents approximate workforce data locally found (2.02).

¹ The Thoracic Society of Australia and New Zealand. (2023). *Australasian Severe Asthma Registry (ASAR)*. thoracic.org.au. Retrieved October 2, 2025, from <https://thoracic.org.au>

Austria

Changes in Health System Characteristics

Slight changes in *Health data recording/reporting* due to being a part of a multinational registry² besides ISAR, changing the total score on this indicator from 10 to 11.

Canada

Changes in Health System Characteristics

A slight change was tracked on *Health data collection and reporting* indicator, with the total score changing from 13 to 14 due to asthma outcome data being disaggregated by geographic location³.

Czechia

Changes in Policy Context

Czechia experienced a significant change in *best practices* (GINA alignment) indicator, now being almost fully in line with *best practices* for Severe Asthma Care⁴ (GINA guidelines) – resulting in a change in score from 5 to 9.

Denmark

Changes in Policy Context

Updates (2022)⁵ in previous documents were identified highlighting the full alignment with best practices in asthma care (GINA strategy for “difficult-to-treat and severe

² STATISTICS AUSTRIA. (latest version). *Inpatient health care: Hospital discharges – The Information Manager*. Retrieved October 2, 2025, from <https://www.statistik.at>

³ Legacy Airway Health. (2022). *Canadian Severe Asthma Registry*. Retrieved October 2, 2025, from <https://www.legacyairwayhealth.ca/canadian-severe-asthma-registry/>

⁴ Identifikační A, Vratislav Sedlák M, Čsaki V. Doporučený postup diagnostiky a léčby obtížně léčitelného bronchiálního astmatu Doporučení pro ambulantní specialisty Standardní léčebný plán. Csaki.cz. https://www.csaki.cz/dokumenty/doporuceny_postup_OLA_2010.pdf

⁵ von Bülow, A., Suppli Ulrik, C., Sidenius, K., Bjerrum, A. S., Christiansen, A., Wimmer, A., Dongo, L., & Porsbjerg, C. (2020, January 29; revised February 1, 2022). *Astma – Svær: Udredning og behandling af patienter med mulig svær astma*. Dansk Lungemedicinsk Selskab. Retrieved from <https://lungemedicin.dk/astma-svaer-udredning-og-behandling-af-patienter-med-mulig-svaer-astma/>

asthma”) changing the score from 6 to 10 for this indicator. This has also resulted in updating score for the level of guidelines implementation from 3 to 4 (“national implementation”)

Changes In Treatment and Drug Access

Denmark shows slight changes in *Treatment and drug access* indicator, with more asthma treatments and drugs being available to patients, resulting in change of score from 15 to 17. On the other hand, there is also a great improvement in Biologics access (*Access to severe asthma-specific treatments*) with the score moving from 6 to 12.

Changes in Health System Characteristics

Slight changes in *Health data recording/reporting* due to being a part of multinational registry besides ISAR changing the total score on this indicator from 10 to 11. Variables included in DSAR⁶ are coordinated with the pan-European severe asthma database coordinated by the European Respiratory Society (ERS) besides ISAR⁷.

Estonia

Changes in Policy Context

Updates due to Estonia reporting data to ISAR resulting in score in Severe asthma registries moving from 0 to 1.

Germany

Changes in Health System Characteristics

Slight changes in *Health data recording/reporting* due to being a part of multinational registry⁸ besides ISAR changing the total score on this indicator from 9 to 10.

Hungary

⁶ Dansk Svær Astma Register (DSAR). (2022). *DSAR – Årsrapport 2022*. Retrieved from <https://dsar.dk/reportstab/dsar-arsrapport-2022.pdf>

⁷ European Respiratory Society. (n.d.). *SHARP: Severe Heterogeneous Asthma Research collaboration, patient-centred*. Retrieved [date accessed], from <https://www.ersnet.org/science-and-research/clinical-research-collaboration-application-programme/sharp-severe-heterogeneous-asthma-research-collaboration-patient-centred/>

⁸ STATISTICS AUSTRIA. (latest version). *Inpatient health care: Hospital discharges – The Information Manager*. Retrieved October 2, 2025, from <https://www.statistik.at>

Changes in treatment and drug access

Hungary shows changes in *Treatment and drug access* indicator, with more asthma treatments and drugs being available to patients, resulting in change of score from 13 (*Please note: this indicator contained a missing value in 2023 SAI and was therefore filled with an imputed value!*) to 8, confirming the availability of certain treatments and drugs⁹. On the other hand, there is also a great improvement in Biologics access ¹⁰(Access to severe asthma-specific treatments) with the score moving from 6 (*Please note: this indicator contained a missing value in 2023 SAI and was therefore filled with an imputed value!*) to 9.

Ireland

Changes in Policy Context

Ireland experienced a slight change in *best practices* for Severe Asthma Care (GINA guidelines) indicator – resulting in change in score from 6 to 7.

Lithuania

Changes in Policy Context

Lithuania experienced a slight change in *best practices* for Severe Asthma Care (GINA guidelines) indicator – resulting in change in score from 5 to 6.

New Zealand

Changes in Policy Context

New Zealand experienced a change in *best practices* for Severe Asthma Care (GINA guidelines) indicator – resulting in change in score from 5 to 7.

Norway

Changes in Policy Context

⁹ Nemzeti Egészségbiztosítási Alapkezelő. (2025, October 1). Gyógyszerkereső. Retrieved October 2, 2025, from https://www.neak.gov.hu/felso_menu/lakossagnak/gyogyszerkereso

¹⁰ Nemzeti Egészségbiztosítási Alapkezelő. (2025, October 1). Gyógyszerkereső. Retrieved October 2, 2025, from https://www.neak.gov.hu/felso_menu/lakossagnak/gyogyszerkereso

Improvement in Tobacco control policy resulting in a small change in score for *Strength and scope of tobacco consumption and sale regulations* from 8 to 9.

Poland

Changes in Policy Context

Poland has experienced significant changes in policy context scores, due to identifying guidelines for severe asthma from 2023¹¹, updated in 2024¹² that are now more widely available, and their full implementation at the national level with change of score from 0 to 4 on the indicator *Severe Asthma Guidelines*. Poland also ensures being almost fully in line with *best practices* for Severe Asthma Care (GINA guidelines) – resulting in change in score from 4 to 8.

Portugal

Changes in Policy Context

Portugal has experienced significant changes in policy context score, due to document describing full implementation of the guidelines¹³ at the national level with change of score from 1 to 4 on the indicator *Severe Asthma Guidelines*.

Republic of Korea

Changes in Policy Context

Improvement in Tobacco control policy resulting in a change in score for *Strength and scope of tobacco consumption and sale regulations* from 9 to 12.

¹¹ Polskie Towarzystwo Alergologiczne, Polskie Towarzystwo Chorób Płuc, & Kolegium Lekarzy Rodzinnych w Polsce. (2023). *Standardy diagnostyki i leczenia astmy 2023*. Retrieved from <https://pta.med.pl/wp-content/uploads/2023/03/Standardy-diagnostyki-i-leczenia-astmy-2023.pdf>

¹² Konsultanci krajowi w dziedzinie alergologii i chorób płuc. (2024, February 16). *Astma – opieka koordynowana: wytyczne konsultantów krajowych*. Narodowy Fundusz Zdrowia. Retrieved from https://www.nfz.gov.pl/download/gfx/nfz/pl/defaultstronaopisowa/1097/13/1/astma_opieka_koordynowana_wytyczne_konsultantow_krajowych_-_16.02.2024.pdf

¹³ Holgate, S., Ryan, D., Brito De Sá, A., et al. (n.d.). *Guia prático: Difficult-to-manage asthma* [Portuguese version]. International Primary Care Respiratory Group (IPCRG). Retrieved from https://www.ipcrg.org/sites/ipcrg/files/content/attachments/2020-02-15/DTH2_Difficult_to_manage_asthma_PORTUGUESE.pdf

Slovakia

Changes in Policy Context

Slovakia has experienced significant changes in policy context scores, due to discovering guidelines for severe asthma and their implementation at the national level. Despite the latest document being from 2010¹⁴ Slovakia also ensures being in line with best practices for Severe Asthma Care (GINA guidelines), confirmed by the guidelines first author (Hrubíško, M.) in an expert survey. This changed the score on the indicator of *Severe Asthma Guidelines* from 0 to 4, as well as best practices from 0 to 10. The survey also confirmed the Slovakian national strategy for asthma being in a planning phase, resulting in a score of 1 on the Asthma Strategy indicator (up from 0).

Changes in Treatment and Drug Access

Slovakia shows significant changes in *Diagnostics (inflammatory Phenotyping)*, with more asthma diagnostics available to patients according to an expert surveyed, resulting in change of score from 5 (*Please note: this indicator contained a missing value in 2023 SAI and was therefore filled with an imputed value!*) to 6.

Changes in Health System Characteristics

Significant changes in *Health data recording/reporting* due to new information on data disaggregation obtained through expert survey changing the total score on this indicator from 5 to 11.

United Kingdom

Changes in Policy Context

Changes in alignment with GINA guidelines resulting in change from 0 to 6

Changes in Health System Characteristics

Slight changes in *Health data recording/reporting* due to patient reported health outcome data being disaggregated by geographical location changing the total score on this indicator from 12 to 13.

¹⁴ Hrubíško, M., & Čížnár, P., with Rozborilová, E., Tkáčová, R., Pružinec, P., Majer, I., Brezina, M., Michaličková, J., Kossárová, K., Kayserová, H., & Hochmuth, L. (2010). *Asthma bronchiale: Národné smernice 2010* [PDF]. Slovenská pneumologická a ftizeologická spoločnosť. <https://www.spfs.sk/images/guidelines/Asthma%20bronchiale%20N%C3%A1rodn%C3%A9%20smernice%202010.pdf>

Appendix B – Cyprus and Romania Severe Asthma Country Profiles



Cyprus – Severe Asthma Country Profile

 Aggregate Score (Unweighted):
52/100

Country Overview

Cyprus performs **strongly** in **Access and Care Coverage**. The introduction of GeSY (General Healthcare System) in 2019 has established universal coverage and a structured referral pathway through a gatekeeping model, ensuring access to advanced care (Eurohealth observatory). Moreover, Cyprus reports one of the lowest levels of unmet healthcare needs in the EU (0.1 % of the population).

Cyprus has the **lowest score** in **Policy Context**, because it lacks a formal national asthma strategy and dedicated national asthma clinical guidelines. It does, however, rank highly on occupational exposure policies, having transposed EU directives on chemical safety and OSH (Occupational Safety & Health).

Cyprus scores well **above average** in **Health System Characteristics**, supported by a subnational severe asthma registry and a comparatively high number of respiratory



specialists. In addition, the average length of hospital stay for respiratory patients is below average.

In the **Disease Burden category**, Cyprus performs **poorly**, driven by the high societal cost of severe asthma, elevated asthma-related DALYs, and a high rate of adult tobacco use.

The country performs **weakly** in the **Environmental Factors category**, driven significantly by a substantial share of the population living in conditions with poor indoor air quality. Additionally, recurrent desert dust storms can worsen ambient particulate matter exposure.

Key takeaways

1. Strong care access and coverage, but only emerging policy foundations

Cyprus benefits from universal coverage under GeSY, with broad availability of medicines, diagnostics, and specialist services. Although some efforts have been made to contextualise international guidance, Cyprus still lacks a publicly documented asthma strategy and severe-asthma-specific guidelines, risking inefficiency in referral practices. Establishing clear national guidance for asthma diagnosis, stepwise treatment, and follow-up care would provide clearer direction and strengthen alignment across the health system.

2. Broad coverage and advanced therapies, but gaps in effective use remain

The reimbursement framework, with a positive list, low co-payments, and capped out-of-pocket spending, ensures broad formal access, including to biologics in the public sector. This strong coverage foundation, however, may not fully translate into optimal disease control, given the high societal cost and asthma-related DALYs. Strengthening physician training on adherence and self-management, alongside ensuring personalised treatment with lifestyle support, could help narrow the gap between access and real-world outcomes while reducing long-term costs.

3. Environmental and tobacco risks can amplify the burden

Desert dust storms are a frequent occurrence in Cyprus. In the MEDEA childhood asthma study, interventions combining indoor air purification, outdoor exposure reduction, and telemedicine monitoring showed improved asthma symptom control during dust seasons. Engagement of families, schools, and local communities was pivotal to compliance and impact.

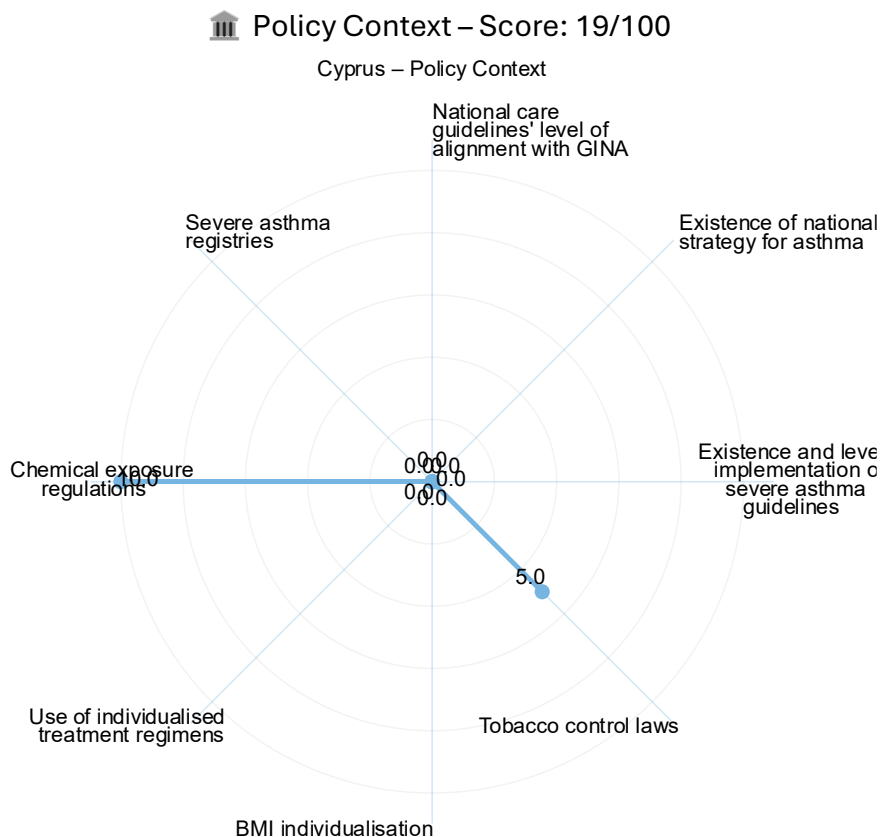
Moreover, high adult tobacco use remains a substantial contributor with only moderate enforcement of smoke-free laws. Broadening air quality mitigation and enhancing tobacco control measures will be key to lowering the environmental burden of asthma.

Best Practices

- Good access to care with comprehensive medicine coverage, diagnostics, and specialist care, supported by capped out-of-pocket costs (with a lower cap for vulnerable groups) and a national positive list that includes advanced therapies
- Structured referral pathway supporting access to specialist care; however, unnecessary referrals should be avoided
- Strong health system capacity supported by subnational registry data and a relatively high number of respiratory specialists. The average hospital stay for respiratory patients is below the EU average, indicating efficiency in inpatient care.

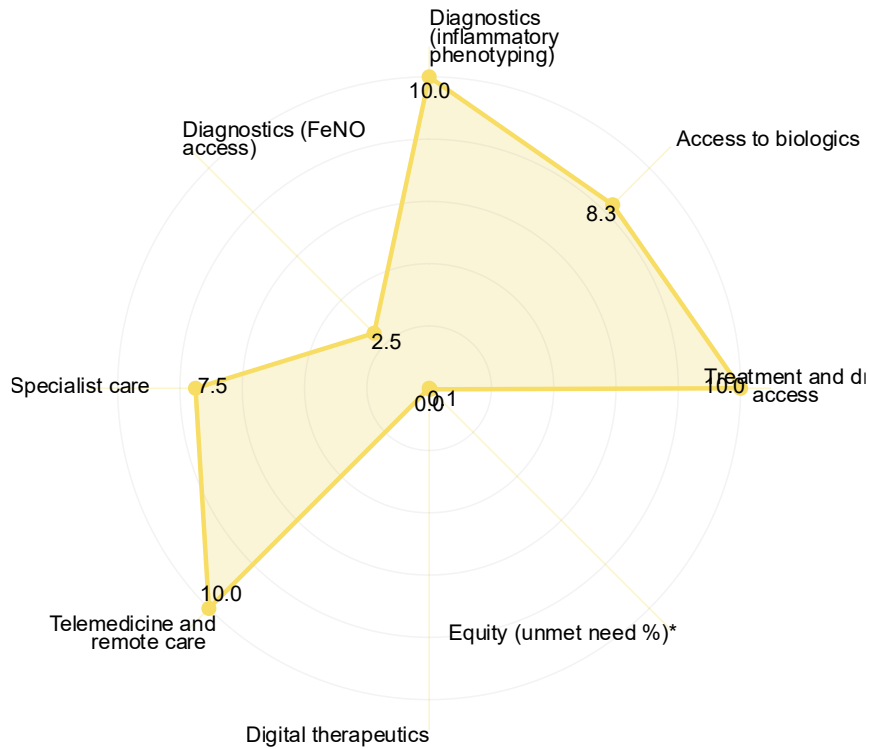
Challenges

- Lack of national asthma strategy and severe asthma guidelines
- High adult tobacco use rate
- High asthma-related societal cost despite available care infrastructure
- Environmental exposures: recurrent desert dust events and poor indoor air quality



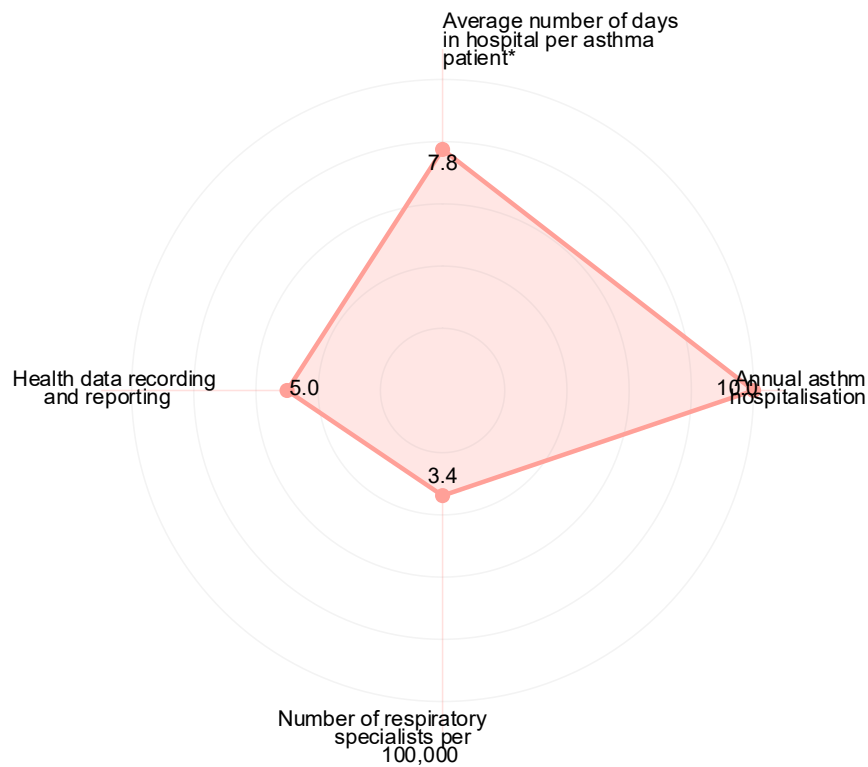
 Access and Care Coverage – Score: 73/100

Cyprus – Access and Care Coverage



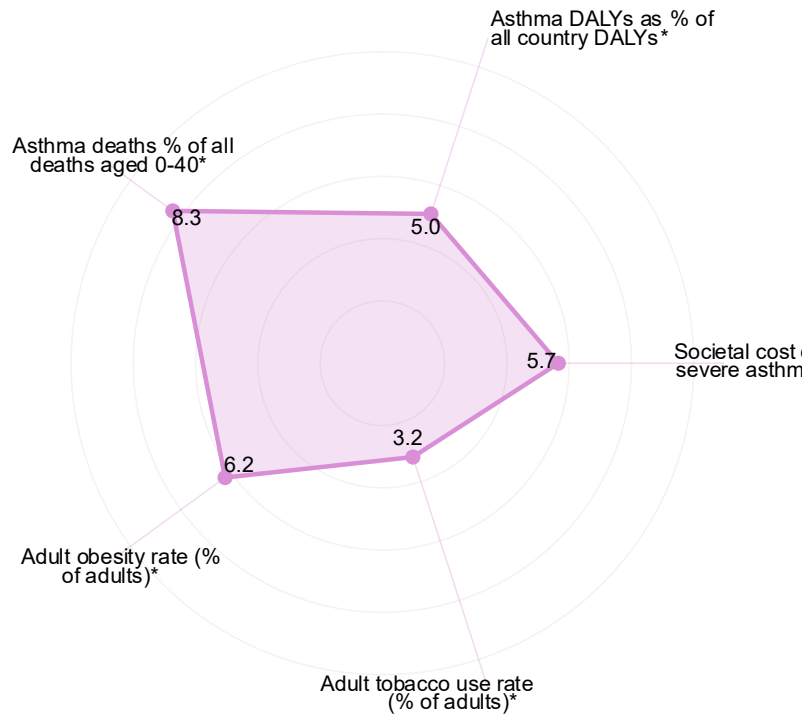
 Health System Characteristics – Score: 60/100

Cyprus – Health System Characteristics



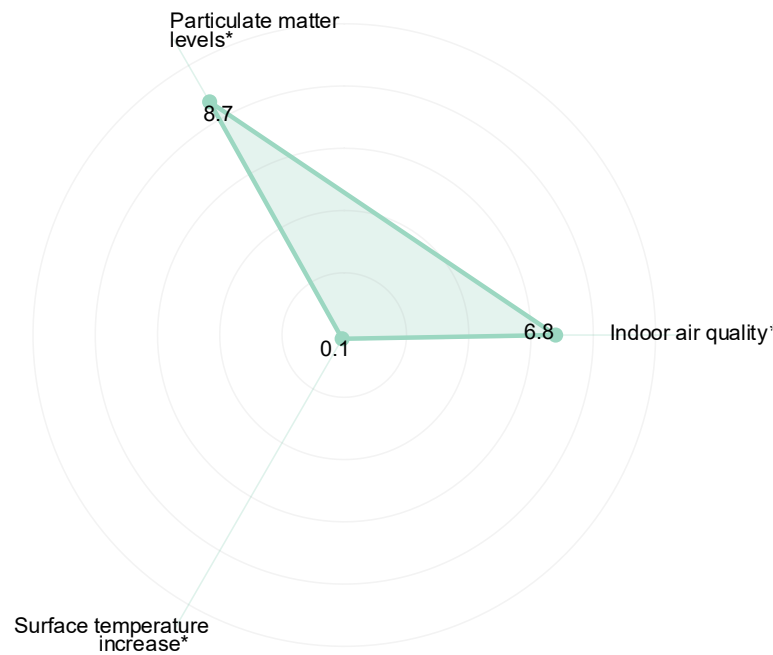
 Disease Burden – Score: 57/100

Cyprus – Disease Burden



 Environmental Factors – Score: 52/100

Cyprus – Environmental Factors





Romania – Severe Asthma

Country Profile

 Aggregate Score
(Unweighted): 65/100

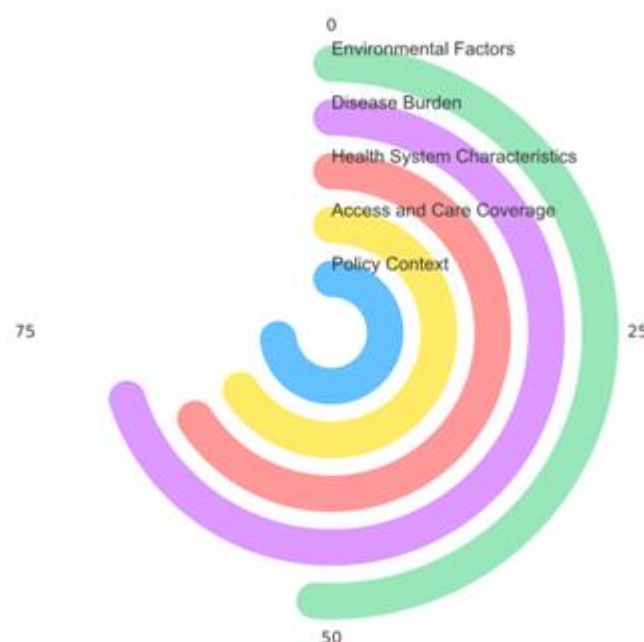
Country overview

Romania performs **strongly** in the **Policy Context** category, underpinned by comprehensive severe asthma care guidelines that are fully aligned with the Global Initiative for Asthma (GINA) recommendations for difficult-to-treat and severe asthma. The country has also implemented robust occupational chemical exposure regulations and

maintains moderately strong tobacco control measures. However, despite these policy strengths, Romania lacks a formal national asthma strategy, limiting system-wide coordination and long-term planning necessary for effective asthma prevention and control.

Romania also performs **above average** in **Access and Care Coverage**, with partial reimbursements for asthma medications, including biologic therapies, and advanced inflammatory phenotyping. The public health insurance system provides widespread access to specialist services, and telemedicine services are permanently regulated (DLA Piper – Telehealth in Romania), supporting continuity of care.

In **Health System Characteristics**, Romania scores **well above average**, underpinned by national-level reporting of severe asthma outcomes and a relatively high number of respiratory specialists. Hospital admissions for asthma are below average, but the average length of hospital stay remains well above average, suggesting potential inefficiencies in inpatient management or follow-up care.



In the **Disease Burden** category, Romania performs **below average**, with a lower-than-average societal cost, asthma-related DALYs, and deaths. However, the overall burden remains affected by high adult tobacco use and rising obesity prevalence, both of which can contribute to poor asthma control and increased comorbidities.

In **Environmental Factors**, Romania performs **below average**, driven by high levels of surface temperature increase and relatively high particulate matter levels.

Key takeaways

1. Strong policy foundations, but limited strategic direction

Romania has well-developed clinical guidelines for severe asthma, closely aligned with international standards, and enforced occupational and chemical safety regulations. However, the absence of a formal national asthma strategy means these strengths are not fully translated into coordinated implementation. Strengthening national policy frameworks, including measurable targets for asthma control, would ensure consistency in diagnosis, referral, and treatment practices across care levels.

2. Broad access to medicines and care, with potential to strengthen outcomes

Romania demonstrates good levels of access to health services, supported by a universal insurance framework and a well-structured reimbursement system. However, coverage for some general asthma medications remains partial, and patient out-of-pocket costs can vary, creating small but notable access disparities across regions. While biologic therapies are included on the national list, uptake remains limited due to administrative and referral barriers.

Despite these constraints, Romania's policy and clinical foundations are strong, providing an opportunity to achieve better control and lower disease burden. With consistent application of existing guidelines, improved coordination across care levels, and enhanced support for patient adherence and education, Romania could translate its current infrastructure into stronger real-world outcomes for people living with severe asthma.

3. Lifestyle and environmental risks amplify disease burden

High adult tobacco use rate and rising obesity levels remain key modifiable risk factors contributing to poor asthma control. Although Romania enforces occupational safety and air quality regulations, climate-related temperature increases, and elevated particulate matter levels can exacerbate respiratory symptoms.

Moreover, weight reduction and structured physical activity programs are not routinely prescribed for high-BMI severe asthma patients, limiting the integration of lifestyle management into standard care. Strengthening tobacco control enforcement,

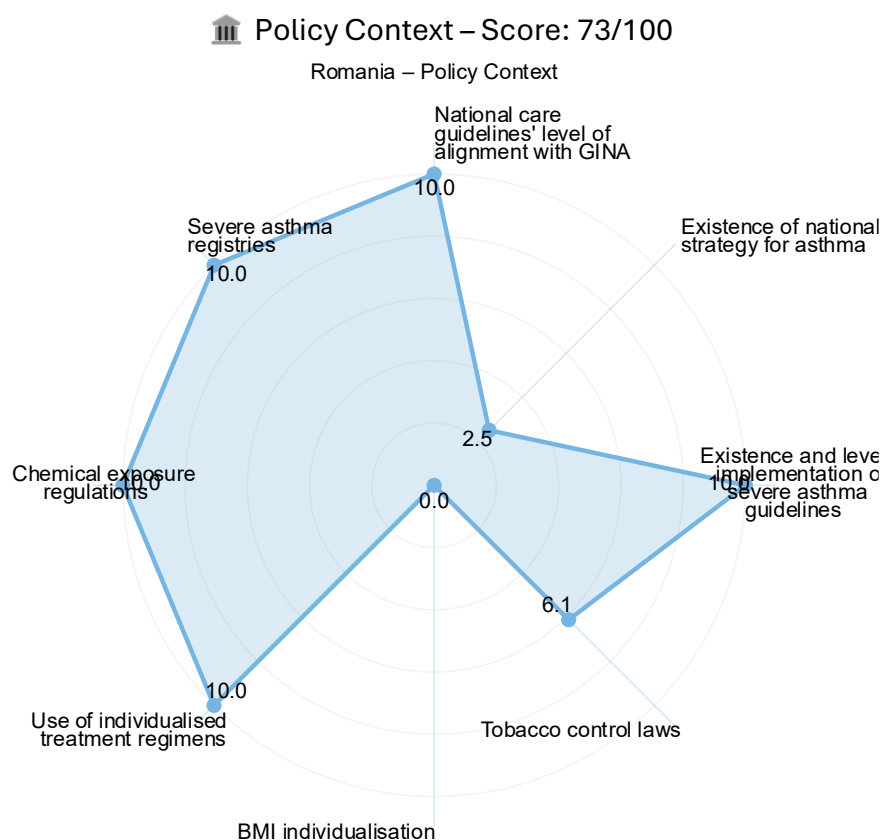
expanding public health campaigns on lifestyle factors, and improving indoor and outdoor air quality measures will be critical to lowering the overall asthma burden.

Best Practices

- Comprehensive severe asthma guidelines fully aligned with GINA recommendations
- Strong occupational safety legislation on chemical exposure
- Wide reimbursement coverage for asthma medicines, including biologics
- Permanent regulation of telemedicine, supporting access to specialist care
- Robust specialist capacity and strong national data reporting for severe asthma

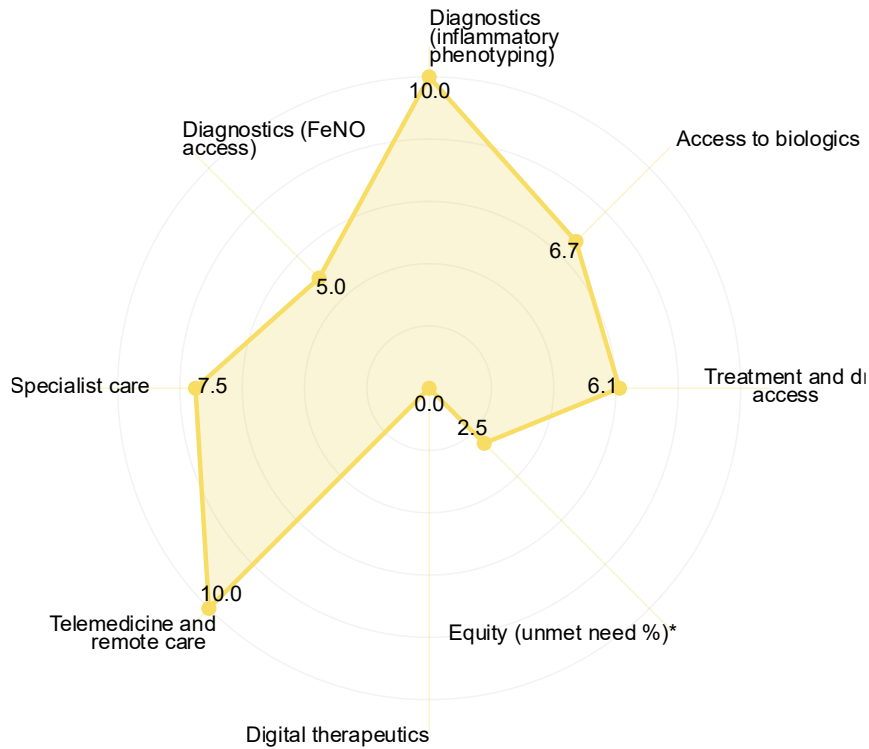
Challenges

- Lack of a national asthma strategy and formal implementation plan
- High adult tobacco use and increasing obesity prevalence
- Above-average hospital stay durations for asthma admissions
- Environmental pressures, including rising surface temperatures and air pollution



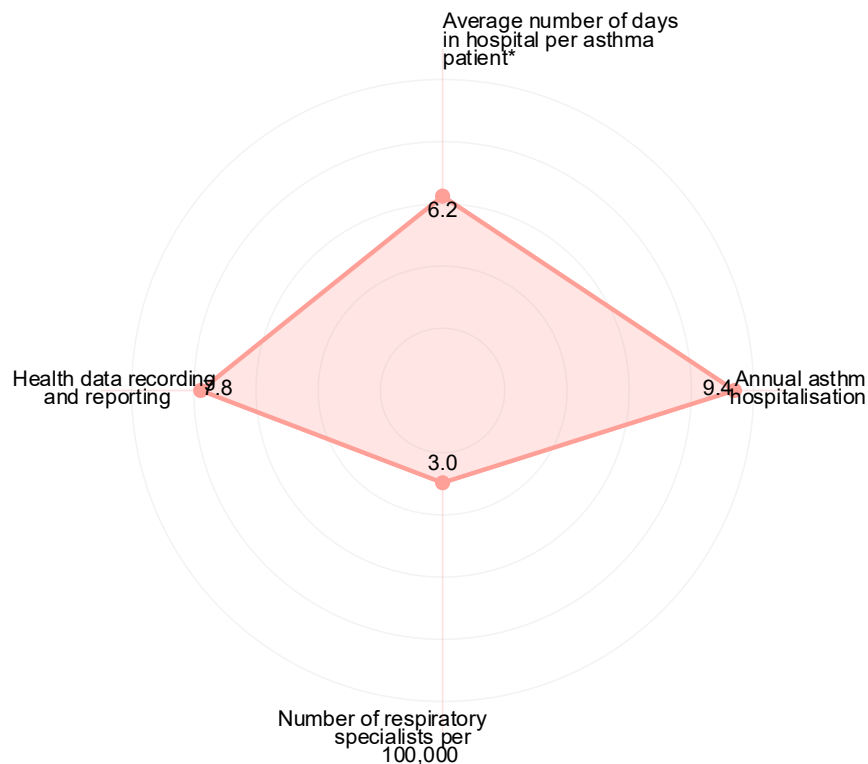
 Access and Care Coverage – Score: 66/100

Romania – Access and Care Coverage



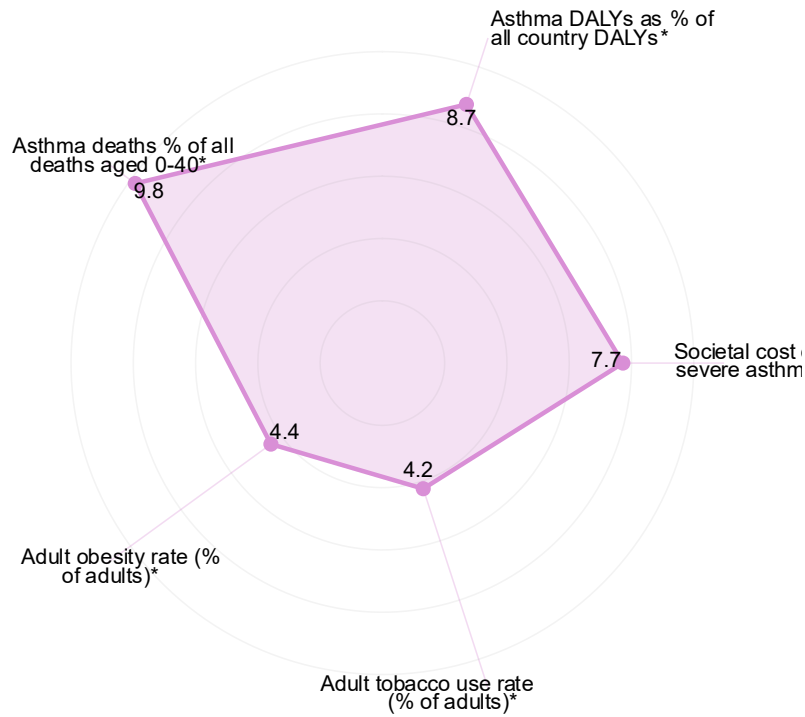
 Health System Characteristics – Score: 66/100

Romania – Health System Characteristics



 Disease Burden – Score: 70/100

Romania – Disease Burden



 Environmental Factors – Score: 51/100

Romania – Environmental Factors

